

ABSTRACT OF THE DISCLOSURE

The invention provides improved interface tools, both physical and digital for performing two and three-dimensional spatial manipulation and two and three-
5 dimensional gaming using a set of tangible tools. These tools are shaped to specific forms mimicking the tools' primary function. For example, one of the tools is shaped to resemble a pair of kitchen tongs, which gives the user the immediate perception that they are to be used for grabbing. Two physical or digital input devices can be used in conjunction to alter virtual objects. The invention also presents several novel tools to
10 alter and generate three-dimensional objects, for example using an eraser tool, a deformation tool, a spray-painting tool, a smoothing tool, and a texture creation tool. The invention presents several novel means of interacting with video games using the tools mentioned above as a replacement for the standard joystick.